### NATIONAL MATH AND SCIENCE INITIATIVE







"One of my favorite quotes is from Carl Sagan, who said it's suicidal to create a society that depends on science and technology in which no one knows anything about science and technology – and that's the road that we're headed down.

I think part of the issue is that it takes years, decades, to build the capability to have a society that does depend on science and technology.

You need to generate the scientists and engineers, starting in school – elementary school, middle school. You have to fund the research that those scientists go on to do – the fundamental research. You have to generate the engineers that can turn those scientific breakthroughs into products and services. And then you have to have the right environment."

—Sally Ride, President and CEO, Sally Ride Science, former NASA astronaut, first American woman in space

#### A MESSAGE FROM THE PRESIDENT

The United States is facing much more than a temporary economic crisis – we may put a patch on our stalled economic system, but we aren't likely to see robust long-term growth unless we get a 21st century engine.

The truth is that our young people are not receiving the kind of math and science education they will need for our country to remain competitive in the global marketplace. This crisis in intellectual capital threatens our national security as well as our economic security.



Tom Luce

Evidence has been mounting in recent years that American students are falling behind the rest of the world in math and science. U.S. students recently finished well below average in international rankings by the Organization for Economic Cooperation and Development – 15th in reading, 19th in math, and 14th in science. Our students ranked behind Canada, Japan, and Western Europe in math and science – behind emerging European countries such as Slovenia, Estonia and even Liechtenstein. They scored ahead of just a handful of countries, including Greece, Turkey and Mexico.

Eighteen months ago, there was no organized national response from the private sector to this crisis. Today, the National Math and Science Initiative (NMSI) is helping remedy this drastic decline in math and science education by replicating proven programs on a national scale.

- + Through our Advanced Placement\* Training and Incentive Program (APTIP), NMSI has awarded more than \$79 million in grants to non-profits in six states to promote student participation in Advanced Placement math, science, and English courses. In just one year, enrollment in program schools in these states has increased nearly 70 percent, bringing more rigorous math and science education to over 13,000 students.
- + In addition, NMSI has issued nearly \$30 million in grants to 13 colleges and universities across the country to replicate the UTeach program. More than 1,000 students now are enrolled in UTeach programs, which equip students majoring in math, science, or computer science to receive full teaching certification without adding time or cost to their degree. Through this initiative, we are ensuring that there is a new wave of qualified math and science teachers in our country.

After only 18 months, NMSI programs are making progress with those two programs in **14 states** – and there is a **waiting list more than double that number** to adopt the programs.

Looking ahead, NMSI will move forward to expand our programs and create new partnerships that will multiply that success on a broader scale.

In the next five years, NMSI expects to have AP Training and Incentive Programs in **25 states**, impacting students in up to **2,000 American high schools**. And, it is anticipated the UTeach program will be in as many as **50 universities**, dramatically multiplying the number of math and science teachers with content knowledge and certification in our country.

All of us in America must commit to making math and science education a priority in this country if we are to effectively compete on a global scale. For the last 200 years, math and science have been the dynamic force behind the U.S. economy – from the cotton gin to the telegraph to the incandescent light bulb to synthetic fabrics to miracle drugs to the microchip. Brainpower has been the key to economic power. So long as America led the world in math and science – fueled by a public education system that makes education accessible to the masses – America moved forward.

For the last few decades, we have been living off the education surge from the G.I. Bill after World War II, which made higher education more affordable for many more Americans. Now, the post-war Sputnik generation is retiring – and our education system does not have enough math and science students in the pipeline to keep up with new competitors overseas. While America was coasting on the momentum from yesterday's breakthroughs, the Iron Curtain fell and free enterprise was embraced by a new wave of countries. The U.S. now has billions of new competitors who are vying to beat us at our own free market game.

At the same time, our financial system is in crisis. Economic recovery for the short term will be difficult enough – but it will be impossible for the long term if we do not shore up our "ecology of math and science." We are leaving our children a big deficit; we need to at least give them the tools to be competitive so they can pay it.

We know that math and science can change the world – they are essential to address the toughest challenges of this century – secure energy sources, healthcare, space exploration, cyber security, and affordable food.

And we know what works – verifiable programs like AP Training and Incentives and UTeach. Without further delay, we should ask government and corporate leaders to take action today. Every minute that we wait, America falls farther behind other countries. We need both government and business to fund crucial programs like AP and UTeach.

It's not enough to diagnose the problem. Yes, we know the world is flat. But what are we going to do about it? We must start educating kids today for the jobs of tomorrow. We need better math and science classes. We need many more math and science teachers. We need to launch a national campaign to make math and science a national priority. And we need to act like our future depends on it. After all, it does.

NMSI is proud of its role in stepping up to this challenge. We hope you will join us in our efforts. Together we can ensure that our American students receive the very best in math and science education.

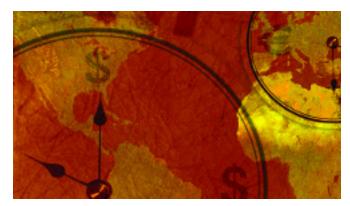
Tom Luce

Chief Executive Officer

National Math and Science Initiative

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#### CORE PROGRAMS

Eighteen months ago, the National Math and Science Initiative did not exist. Today NMSI is helping lead our country forward in math and science. In just 18 months, NMSI has rolled out our first round of grants and has implemented programs in 14 vanguard states. In 2007, NMSI

awarded grants of \$13.2 each to non-profits in six states to institute AP Training and Incentive programs and grants of \$2.4 million to 13 institutions of higher learning for the replication of the UTeach training program for math and science teachers.

These programs are essential to address two of our country's most pressing challenges:

- + Getting more American students to master the math and science knowledge that is crucial in today's high-tech economy
- + Training more teachers in math and science content so they can inspire and equip the next generation to succeed

#### **Advanced Placement Training and Incentive Programs**

Advanced Placement Training and Incentive Programs are now operating in these six states: Alabama, Arkansas, Connecticut, Kentucky, Massachusetts, and Virginia. Thanks to those programs, more than 13,000 students are now enrolled in more challenging math, science and English classes in 67 schools. Enrollment in AP programs has increased nearly 70 percent in those schools thanks to NMSI grants.

When compared to other schools in their respective states, 59 of those 67 schools have a higher percentage of students that are either minorities or economically disadvantaged. The needs in these schools are significant; the historical average passing rates for AP math, science, and English tests are significantly lower than the national average: 85 passing exams per 1,000 students vs. 99 passing exams per 1,000 students nationally. NMSI expects to dramatically improve those scores.

#### **UTeach Program**

The UTeach program for math and science teachers has been implemented in 13 universities, including: Florida State University, Louisiana State University, Northern Arizona University, Temple University, University of Kansas, University of California at Berkeley, University of Colorado at Boulder, University of California at Irvine, University of Florida, University of Houston, University of North Texas, University of Texas at Dallas, and Western Kentucky University.

Close to 550 new students have enrolled, representing a new generation of qualified math and science teachers for our country.

Originated at The University of Texas at Austin, the UTeach program equips students majoring in math, science or computer science to receive full teaching certification without adding time or cost to their degree. UTeach teachers, who often serve in schools with a low-income student population, foster scientific and numeric literacy in children, which prepares them to function in a society that is increasingly dependent on science and technology.

Bringing more math and science teachers into K-12 classrooms has been identified as a priority by business leaders and elected officials. The nation will need an estimated 280,000 new math and science teachers by 2015, according to the Business-Higher Education Forum, a research and advocacy organization in Washington.



Experience has shown that UTeach graduates at The University of Texas have a 75 percent teacher retention rate compared to a national average of 65 percent.

#### **Reaching Out to Under-Represented Groups**

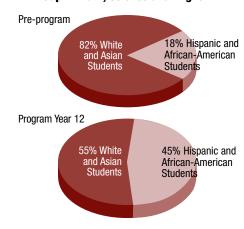
The NMSI AP Training and Incentive Program is a proven intervention to close the gap between African-American and Hispanic students compared to their Caucasian counterparts. In the original Dallas program, the increase over a 12-year period for Caucasian and Asian stu-

dents passing math, science, and English exams was six-fold. However, the increase for African-American and Hispanic students over the same 12-year period for passing exams was 23-fold. More specifically,

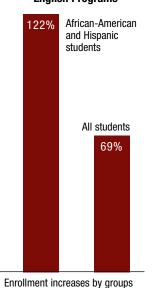
before the program, 18 percent of passing scores on AP math, science, and English exams were made by African-American and Hispanic students. By the 12th year of the program, 45 percent of the passing scores were made by African-American and Hispanic students, effectively closing the gap. All over Texas, the program had similar trends. Some other programs close the gap on minority participation; our program closes the gap on achievement.

Early indicators from the NMSI AP Training and Incentive Programs launched in six states in Fall 2008 show that our program will continue to close the gap in our replication process. While enrollment in AP math, science and English has increased 69 percent for all students, for African-American and Hispanic students, the enrollment increase is 122 percent.

#### AP Programs Are Closing the Achievement Gap in Math, Science and English



#### Student Enrollment Increases in AP Math, Science and English Programs



Passing an AP exam is correlated with much greater success in college: six-year college graduation rates go from 15 percent to over 60 percent for African-American and Hispanic students who have passed at least one AP exam. (National Center for Educational Accountability)

One of the most pressing needs in improving minority achievement in math and science is producing more math and science teachers who majored in the subjects they are teaching. About a third of high school math students and two-thirds of those enrolled in physical science in many urban schools have teachers who did not major in the subject in college – or are not certified to teach it. The UTeach program graduates teachers who have math and science content knowledge and prepares them for certification. Up to 48 percent of the students enrolled in the UTeach program at The University of Texas at Austin in recent semesters were classified as minorities. Experience also has shown that about two-thirds of UTeach graduates teach in urban schools and about 45 percent teach in schools with more than 40 percent low-income students.

Reaching those students so they will have access to the jobs of the future is crucial – in 2007, the National Assessment of Educational Progress on eighthgraders showed that only 14 percent of African-Americans, 17 percent of Hispanics, and 17 percent of low-income students were proficient in math.

(as of 12/1/08)

Currently, women, minorities, and people with disabilities represent two-thirds of the American workforce, yet they are only a small fraction of those working in science, engineering and technology.

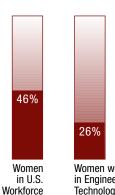
#### Addressing the Gender Gap in Math and Science

Women, in particular, are being left behind in the critical fields of math and science. To maintain its scientific and engineering leadership amid increasing economic and educational globalization, the United

States must aggressively pursue the innovative capacity of all of its people – women and men. Producing the needed pool of American workers who are prepared for tomorrow's technological challenges will require greater numbers of women in STEM fields. And for women to participate to their full potential across all science and engineering fields, they must see a career path that allows them to reach their full intellectual potential.

- Women constitute 46 percent of the workforce in the United States, but hold just 26 percent of the jobs in the fields of engineering, science and technology. Less than 10 percent of American engineers are women.
- According to the National Academies, women who are interested in science and engineering careers are lost at every educational transition. With each step up the academic ladder, from high school on through full professorships, the representation of women in science and engineering drops substantially.

Women Are **Under-Represented** in STEM Fields



Women working in Engineering, Technology and

In order to meet this unique challenge, the National Math and Science Initiative is partnering with a variety of organizations to expand the number of women entering math and science and engineering careers. Those collaborations include the FORTUNE Young Leaders Program, which provides leadership training for undergraduate women majoring in math and science, and Sally Ride Science, which sponsors science festivals to engage young girls in hands-on science discovery. In addition, NMSI is pursuing a public awareness campaign in cooperation with the Teen Vogue publication, in order to reach young women at key decision-making points during their middle and high school years. By collaborating with a spectrum of organizations, NMSI can address two of our nation's greatest needs: closing the gender gap and responding to the national crisis in math and science.

#### PUBLIC OUTREACH AND EDUCATION

#### **National Convocation**



In April we partnered with the National Academies in hosting the "Rising Above the Gathering Storm - Two Years Later" convocation in Washington, D.C., to assess what has been accomplished since the landmark "Rising Above the Gathering Storm" report warned that our country is falling behind in math and science achievement. The strong lineup of speakers included three cabinet secretaries, two senators and five members of Congress, as well as Intel Chairman Craig Barrett, former astronaut Sally Ride, and former Georgia Tech President Wayne Clough, now the new Secretary of the Smithsonian. The clear consensus was that

Congress is beginning to recognize the hurdles we face to keep America competitive – but there is much work to do and more funding needed.

We expected 350 people might attend the convocation – more than 550 showed up and even more wanted to register. It is clear that there is a growing interest in math and science education.

#### **UTeach 2008 Conference**

When the UTeach Institute held its second national conference May 20, 2008 on the UT Austin campus, over 200 people attended and the response was equally enthusiastic. An additional 25 universities that are interested in replicating the program to train math and science teachers sent representatives to learn more about the program and compare notes with the current 13 replication universities.

#### PARTNERSHIPS AND COLLABORATION

As NMSI's stature as a leader in STEM issues increases, more opportunities for partnerships and collaborations are arising. Currently, NMSI is creating cooperative programs with a variety of state, national and corporate entities.

#### Georgia's Partnership for Reform in Math and Science (PRISM)

NMSI has created a national Parent's Guide to Math and Science with PRISM that will be distributed to Congressional leaders in January 2009. NMSI is exploring ways to replicate a successful, statewide public awareness



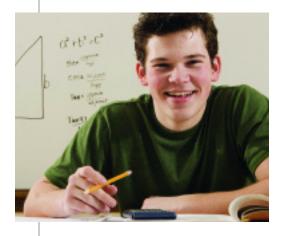
program developed by PRISM to get parents involved in math and science education. The program includes billboard messages, Public Service Ads, website guides for parents and "Family Math and Science Nights" at schools.

#### **National Association of State Universities and Land Grant Colleges**

NMSI has been working with the National Association of State Universities and Land Grant Colleges on a potential compact on the production of more STEM teachers and a metric for determining the need and overall production of STEM teachers to be applied on a state-by-state basis.

#### National Academies, National Science Foundation and Army Material Command

NMSI is counseling with the National Academies, America's premier science advisers, the National Science Foundation and the Army Material Command about ways to implement the recommendations of the landmark "Rising Above the Gathering Storm" report, which issued a national warning in 2005 about the decline of math and science education in the U.S. and recommended steps to address the problem.



#### **Cowen Institute**

NMSI is working closely with the Scott S. Cowen Institute for Public Education Initiatives at Tulane University in New Orleans to launch a pre-AP program this fall in the New Orleans public schools, which are still struggling to recover from the devastation of Hurricane Katrina. The pre-AP program will help provide middle-school students with the foundational math and science skills that are essential preparation for taking Advanced Placement courses in high school, dramatically increasing the students' chances for future success in college and math and science careers.

#### **Texas Instruments and DreamWorks Animation**

Two leading American corporations, Texas Instruments and DreamWorks Animation, are sponsoring the inaugural "FILMS (Fun In Learning Math and Science) Video Competition" this fall. Students in Advanced Placement math, science, and English courses in the six states awarded grants by NMSI for AP Training and Incentive Programs, are being invited to submit three-minute videos with the theme that math and science are fun. Winners and their schools will receive scholarships, graphing calculators and a tour of the DreamWorks Animation site in California. Winning videos will be shown in a special "premiere" in early 2009.

#### Young Leaders in Math and Science

This fall, a Young Leaders in Math and Science program is being launched by FORTUNE, ExxonMobil, and NMSI to provide leadership training for female college students seeking careers in math and science. Women CEOs from leading American companies will provide leadership and career guidance for the students from across the country.



#### **Business Roundtable, Philanthropy Roundtable**

NMSI has been a resource for a variety of organizations concerned about improving STEM education, including the Business Roundtable, which distributed information on the STEM crisis at the "Rising Above The Gathering Storm" convocation, and the Philanthropy Roundtable, which has received presentations on NMSI's "Funding to Scale" white paper.

#### 4-H Youth Group

NMSI is in ongoing discussions with national youth groups such as 4-H about ways to engage more young people in math and science careers as well as with youth publications about ways to improve cultural images among young girls about math and science careers.

### Carnegie Institute for Advanced Study – Commission on Mathematics and Science Education

NMSI is consulting with Carnegie-IAS on research into youth attitudes on math and science and effective ways to move more young people into math and science study.

#### **Congressional Testimony**

In February 2008, NMSI CEO Tom Luce briefed a special session of the House Diversity and Innovation Caucus at the Rayburn House Office Building on how NMSI programs are helping more minority students succeed in math and science and how the America COMPETES Act can support further expansion of proven programs.

In July 2008, Luce joined leaders from the private sector in testifying before the U.S. House of Representatives Committee on Education and Labor July 22 in order to re-emphasize the need for a Congressional commitment to math and science education. U.S. Rep. George Miller, the Education and Labor Committee Chairman, presided over the hearing on "Innovation in Education through Business



and STEM Partnerships." Others appearing before the committee were Phil and Amy Mickelson, founders of the Mickelson Teachers Academy; Melendy Lovett, Senior Vice President & President of Education Technology, Texas Instruments; Brian H. Wells, Chief Systems Engineer of Raytheon; Dr. Ramona Chang, Director of Curriculum for the Torrance Unified School District in California; Dr. Sally Ride, former NASA astronaut and President of Sally Ride Science;

Dr. Carlo Parravano, Merck Institute for Science Education; and Patty Sullivan, IBM Education Solutions Executive, IBM Corporation.

#### **LOOKING AHEAD**

In the months ahead NMSI will be moving forward with all possible speed to expand our programs and create new partnerships that will multiply that success.

- + In the next five years, NMSI
  expects to have AP Training and
  Incentive Programs in 25 states,
  impacting students in up to 2,000
  American high schools.
- + It is anticipated the UTeach program will be in as many as 50 universities, dramatically multiplying the number of math and science teachers with content knowledge and certification in our country.

NMSI will be spreading the word to more Americans that revitalizing our

nation's STEM education is an urgent need. The message needs to go out that STEM education isn't just for the rich kids or the smartest kids, but is a necessity for all kids. This isn't just an educational necessity, but an economic and national security one as well. The message needs to go out that STEM education isn't just for future brain surgeons and rocket scientists, but for any person looking to get a job in the coming years. Essentially, STEM is a requirement for all to function in the 21st century society. It is important to students and their parents, to educators in K-12 and higher ed, to the business community, to civic leaders, to policymakers, and everyone in between.

#### **APPENDIX**

Advanced Placement Progress Report .....10

"Among the most consistently cited challenges facing science and math education are the number and quality of teachers. The National Science Board's Science and Engineering Indicators 2008 report noted that 80 percent of schools had teaching vacancies last year, with 74 percent having vacancies in math programs and 56 percent having openings in physical science departments."



### ADVANCED PLACEMENT PROGRESS REPORT December 1, 2008

#### **Strong State Coalitions Are Working**

A major component to the NMSI replication model is paying big dividends already. By requiring state grantees to establish strong partnerships with supporting partners, building influential boards and focusing on self sufficiency, our six states have raised commitments for \$24.6 million in support of their

AP State Fundraising						
Alabama	\$4.9 million					
Arkansas	\$4.4 million					
Connecticut	\$4.7 million					
Kentucky	\$4.3 million					
Massachusetts	\$2.3 million					
Virginia	\$4.0 million					
Total	\$24.6 million					

efforts. These commitments have come from public state and federal grants, private donors, corporate partners and foundations. To date, NMSI has distributed \$4.8 million, leveraging five times that in additional dollars. This partnership model has been our plan from the beginning, but we never expected such great success so early in the process. The APTIP program in these states has generated great enthusiasm and support. At left is a breakdown of fundraising state by state.

#### **Public Relations is Working**

The state APTIP grantees have been generating publicity and solidifying relationships with local, state and federal elected officials by holding back-to-school events. These events are designed to provide recognition to local schools, awareness of the statewide program and build partnership relationships. Most events have been well-attended and have generated publicity for the programs. Events such as these are building for future scaling and self-sufficiency.

APTIP Back-to-School Events for Fall 2008							
COUNTY	DATE	LOCATION	VIPs				
ALABAMA							
Jefferson	8/28	Shades Valley HS (Birmingham)					
Montgomery	8/21	Robert E. Lee HS	Congressman Rogers				
ARKANSAS							
Little Rock	9/29	Parkview HS	Senator Blanche Lincoln				
Lake Hamilton	10/9	Lake Hamilton	US Rep. Mike Ross				
Greene County	10/9	Greene Co Tech HS	Rep. Marion Berry				
Springdale	10/21	Springdale HS	Senator Mike Pryor & Rep. John Boozman				
Greenbrier	10/22	Greenbrier	Vic Snyder				
CONNECTICUT							
New London	9/8		US Rep. Courtney				
Waterbury	9/29		Senator Hartley, Chris Murphy				
New Britain	10/20	New Britain HS	Rep. Chris Murphy				
Coventry	10/31	Coventry HS					
East Hartford			John Larson	(Contir			

#### **APTIP Back-to-School Events for fall 2008 (continued)**

#### **MASSACHUSETTS**

Greater Boston 9/4 Springfield Congressman Neal

VIRGINIA

Rocky Mount 9/26 Franklin High School

Crewe 10/22 Nottaway High School Congressman Forbes Amelia 10/22 Amelia High School Congressman Forbes

#### **Expanding Diversity and Enrollment is Working**

During the first year of preparing for full implementation of APTIP in grantee states, 67 schools were approved for participation. In these 67 schools, recruitment of teachers and students into rigorous math, science and English courses was successful, resulting in a nearly 70 percent increase in enrollment. Moreover, the percent increase for free and reduced lunch students and minority students was even greater at 92 percent and 122 percent respectively. This accomplishment exceeded expectations and puts schools well on their way to meeting target passing scores in the Spring of 2009.

APTIP Enrollment Increases in First Year								
STATE 2007-2008 ENROLLMENT 2008-2009 ENROLLME								
Alabama	1,195	2,670						
Arkansas	1,993	2,800						
Connecticut	949	1,492						
Kentucky	1,415	2,034						
Massachusetts	1,386	1,993						
Virginia	1,120	2,604						
Total	8,058	13,593						

All enrollments at left and below are as of 12/1/08 as reported by grantees and program schools on the NMSI data management system.

Percentage Increase in Enrollment for 2008-09 by State								
State	Math	Math Science English						
Alabama	42%	157%	133%	123%				
Arkansas	51%	28%	44%	40%				
Connecticut	119%	90%	22%	57%				
Kentucky	20%	30%	66%	44%				
Massachusetts	29%	48%	53%	44%				
Virginia	94%	176%	128%	133%				
Total	53%	79%	70%	69%				

Percentage Increase in Enrollment for Free and Reduced Lunch and Minority Students for 2008-09 by State Free or Reduced Lunch State Minority 212% Alabama 254% 72% Arkansas 71% 114% Connecticut 49% 107% 81% Kentucky 83% Massachusetts 64% 170% 357% Virginia 122% 92% **Total** 

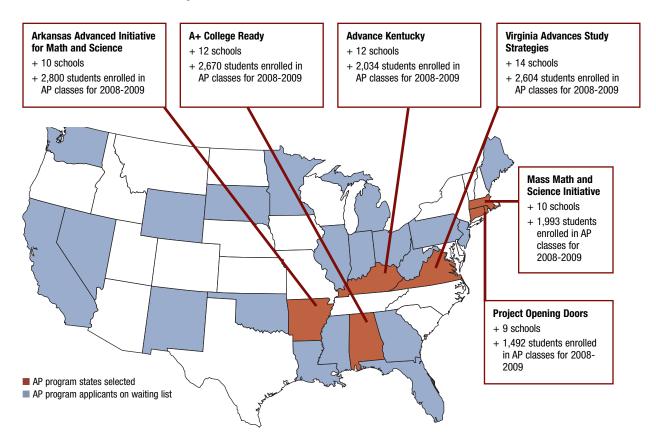
All enrollments at left are as of 12/1/08 as reported by grantees and program schools on the NMSI data management system.

Our state grantees have raised over \$24 million in local matching funds, hired over 30 employees, assessed applications from 190 schools and are operating AP programs in 67 schools this fall.

In the 67 schools implementing the NMSI AP program, there has been a 69 percent increase in AP enrollment in the first year – from 8,058 students to 13,593 students in Fall 2008.

Among minority students, there has been a 122 percent overall enrollment increase in AP classes.

- + 94% increase in AP math
- + 152% increase in AP science
- + 117% increase in AP English



### **Overview of NMSI Teacher Training Programs**

#### **AP Summer Institutes 2008**

AP teachers attended either College Board-sponsored APSI's or Summer Institutes hosted by NMSI State Organizations (NSO). These AP teacher trainings orient new teachers on what to teach and how long to spend teaching each topic. A summary of the numbers of AP teachers trained Summer 2008 follows:

State	AP Math	AP Science	AP English	Total by NSO
Alabama	19	33	22	74
Arkansas	36	45	93	174
Connecticut	19	24	32	75
Kentucky	20	16	30	66
Massachusetts	25	29	30	84
Virginia	38	49	45	132
Total	157	196	252	605

#### **Training for NSO Content Directors**

The NMSI staff, in conjunction with veteran AP Strategies, Inc. (APS) Content Directors and Lead Teachers, conducted five days of training for the math, science and English Content Directors for each of the six NMSI states. The training was held in Dallas and focused on the history of the AP Teacher Training and Incentive Program that began in the Supercollider Schools in 1990, as well as the goals and expectations of the grant, the duties of a Content Director, and the duties of a Lead Teacher. Data was analyzed and strategic plans were developed to help each state reach its goals as they apply to numbers of students enrolled in AP math, science and English classes, and numbers of Qualifying Scores earned by those students.

+ 17 Content Directors were in attendance

#### **Training for NSO AP Lead Teachers**

The NMSI staff, in conjunction with veteran APS Lead Teachers, conducted three days of training for the math, science and English AP Lead Teachers and Content Directors for each of the six NMSI states. The training was held in Dallas and focused on the critical expectations of being an AP Lead Teacher and how their job directly impacts the goals of the grant. The Lead Teachers left the training with concrete plans for the four vertical team meetings they must conduct and how to structure the three-student prep sessions for their content area.

+ 130 AP Lead Teachers and Content Directors were in attendance

#### Two-Day AP Training Conferences in the fall for AP Teachers

AP Teachers go to two-day College Board teacher trainings or NMSI State Organizations (NSO) host their own two-day teacher trainings. Mitigating factors include the limited offerings and timing of the two-day teacher trainings from the College Board. These trainings target aspects of the AP courses not typically addressed during the five-day AP Summer Institutes and allow attendees to experience a variety of presenters and topics.

+ 435 AP math, science and English teachers expected to attend

#### Two Additional Days of AP Teacher Training

Training is conducted by NSO Content Directors and/or Lead Teachers/NMSI staff. This training focuses on the specific needs of each program and both remediates and extends the teacher trainings discussed thus far.

+ 435 AP math, science and English teachers in attendance

#### Prep Sessions for Students (with program teachers attending)

Fall student prep sessions conducted by Lead AP Teachers, Program AP Teachers and/or possibly NSO Content Directors/NMSI staff. Typically, these sessions occur on a Saturday, with each AP subject receiving three six-hour Saturday sessions. These sessions are arguably the most important component of the model and have significant impact on the number of Qualifying Scores earned by AP students.

+ Approximately 8,000 AP math, science and English students are expected to attend on any of the three Student Prep Session offerings

#### **NMSI Secure Website**

NMSI is developing a secured website with classroom materials available for teachers' use. This site will be available to every teacher in a NMSI program school.

#### Pre-AP Teacher Training 2008-2009\*

Teachers of Pre-AP math, science and English courses must also attend teacher training. The NMSI State Organizations are currently scheduling Pre-AP teacher training (LTF) using either their new Pre-AP trainers or a combination of veteran trainers coupled with their new trainers. Each Pre-AP teacher attends four days of training for 2008-2009. The numbers of Pre-AP teachers trained thus far during the 2008-2009 school year follow:

State	Pre-AP Math	Pre-AP Science	Pre-AP English	Total by NSO
Alabama	102	140	111	353
Arkansas	80	120	100	300
Connecticut	95	82	99	276
Kentucky	100	90	80	270
Massachusetts	80	120	100	300
Virginia	35	63	37	135
Total	492	615	527	1,634

<sup>\*</sup>Actual number of teachers trained as of November 10, 2008

#### **Contact Information**

For more information about the replication of AP Training and Incentive Programs, contact Gregg Fleisher, National Program Director AP Training and Incentive Programs, 214-665-2519 gfleisher@nationalmathandscience.org.

### ALABAMA - A+ College Ready

#### www.aplusala.org



#### **President:**

Mary Boehm

#### **Board Chairman:**

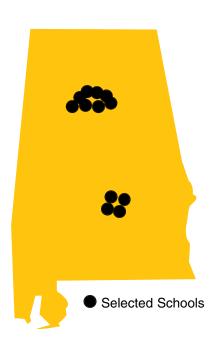
Mr. Ted C. Kennedy

#### **Primary Supporting Partners**

- + A+ Education Foundation
- + Governor Bob Riley
- + Alabama State Department of Education
- + Alabama Mathematics, Science, & Technology Education Coalition
- + Alabama Power Foundation
- + Regions Bank
- + Boeing
- + Science Applications International Corporation (SAIC)
- + Program Schools

\$4.9 million raised. Waiting to hear on grants applied for totaling \$1.2 million

- + Booker T HS
- + Brewbaker HS
- + Clay-Chalkville HS
- + Gardendale HS
- + Hueytown HS
- + Jefferson County IB HS
- + Lee HS
- + LAMP HS
- + Minor HS
- + Pinson Valley HS
- + Pleasant Grove HS
- + Shades Valley HS



# ARKANSAS – Arkansas Advanced Initiative for Math and Science http://ualr.edu/aaims

#### **President:**

Tommie Sue Anthony

#### **Board Chairman:**

Senator Jim Argue, Jr.

#### **Primary Supporting Partners:**

- + Walton Family Foundation
- + Arkansas Department of Education
- + University of Arkansas Little Rock
- + Arkansas Advanced Placement Development Center
- + Program Schools

\$4.4 million raised. Waiting to hear on grants applied for totaling \$2.8 million

- + Booneville HS
- + El Dorado HS
- + Greenbrier HS
- + Green County Tech HS
- + Har-Ber HS
- + Lake Hamilton HS
- + Mills HS
- + Newport HS
- + Parkview HS
- + Springdale HS





### CONNECTICUT- Project Opening Doors http://cbia.com



#### **President:**

Dr. J. A. Camille Vautour

#### **Board Co-Chairmen:**

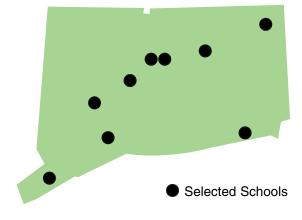
John R. Rathgeber, Dr. Mark McQuillan

#### **Primary Supporting Partners:**

- + USDoE AP Incentive Program
- + Connecticut Business and Industry Association
- + Connecticut State Department of Education
- + Connecticut Department of Higher Education
- + Connecticut Academy for Education in Mathematics, Science and Technology
- + Connecticut Science Center

\$4.7 million raised. Waiting to hear on grants applied for totaling \$0.4 million

- + Ansonia HS
- + Bulkeley HS
- + Coventry HS
- + East Hartford HS
- + New Britain HS
- + New London HS
- + Putnam HS
- + Westhill HS
- + Wilby HS



### KENTUCKY – AdvanceKentucky

#### www.advanceky.com



#### **Executive Director:**

Joanne Lang

#### **Chairman:**

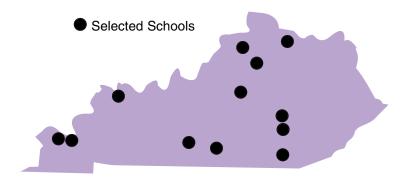
J. Ronald Geoghegan

#### **Primary Supporting Partners:**

- + Kentucky Science and Technology Corporation
- + Kentucky Department of Education (KDE)
- + Kentucky Council on Postsecondary Education (CPE)
- + Partnership for Successful Schools
- + Kentucky Higher Education Assistance Authority (KHEAA)
- + Appalachian Regional Commission (ARC)
- + USDoE AP Incentive Program

\$4.3 million raised. Waiting to hear on grants applied for totaling \$0.7 million

- + Anderson County HS
- + Barren County HS
- + Corbin IND HS
- + Henderson County HS
- + Lone Oak HS
- + Marion County HS
- + North Laurel HS
- + Reidland HS
- + Scott County HS
- + Shelby County HS
- + South Laurel HS
- + Warren East HS



# MASSACHUSETTS – Mass Insight Education & Research Institute http://www.massinsight.org



#### **President:**

Morton Orlov II

#### **Chairmen:**

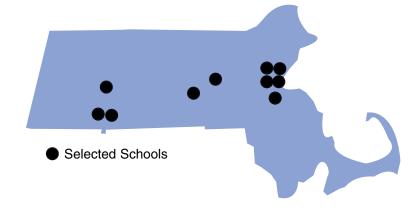
Michael G. Contompasis

#### **Primary Supporting Partners:**

- + Massachusetts Department of Higher Education
- + Massachusetts Department of Elementary and Secondary Education
- + The Boston Foundation
- + The Liberty Mutual Foundation
- + The Linde Family Foundation
- + MassMutual Insurance
- + Microsoft Corporation
- + The Nellie Mae Education Foundation
- + The Noyce Foundation
- + State Street Foundation, Inc.
- + Program Schools

\$2.3 million raised. Waiting to hear on grants applied for totaling \$1.3 million

- + Chelsea HS
- + Malden HS
- + Marlboro HS
- + Milton HS
- + North HS
- + Northampton HS
- + O'Bryant HS
- + Revere HS
- + Springfield Central HS
- + Springfield Renaissance HS



### VIRGINIA – Virginia Advanced Strategies www.vaadvstudy.org



#### **President:**

Paul C. Nichols III

#### **Board Chairperson:**

Dorothea Shannon

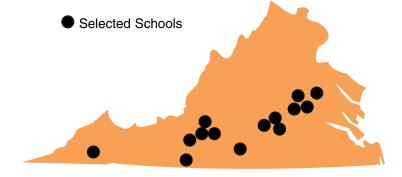
#### **Primary Supporting Partners:**

- + Halifax Educational Foundation, Inc.
- + Virginia Tobacco Indemnification and Community Revitalization Commission
- + Old Dominion Electric Cooperative
- + Dominion
- + Altria (Philip Morris' Umbrella Company)

\$4 million raised. Waiting to hear on grants applied for totaling \$3.4 million

#### **Program Schools:**

- + Amelia HS
- + Deep Run HS
- + Franklin HS
- + Halifax HS
- + Jefferson Forest HS
- + Liberty HS
- + Marion HS
- + Martinsville City HS
- + Nottoway HS
- + Prince Edward HS
- + Richmond Community HS
- + Staunton River HS
- + Thomas Jefferson HS
- + Varina HS



### UTEACH REPORT October 2008

#### UTeach at The University of Texas at Austin

UTeach offers compact degree programs that allow students to graduate in four years, having completed both a mathematics, science, or computer science degree and the requirements for secondary teacher certification. Hallmarks of the program include early field experiences for students and comprehensive mentoring by highly experienced and successful public school teachers. From its modest start as part of The University of Texas College of Natural Sciences pilot program of 28 students in the Fall of 1997, UTeach has grown to a current enrollment of more than 450 students, graduating roughly 70 highly qualified, certified, and sought-after math science, and computer science teachers each year. Graduates of the UTeach program develop and foster scientific and mathematic literacy in children in order to prepare them to lead in a society that is increasingly dependent on science and technology. Over the past decade, the UTeach program has been so successful in producing significantly more certified mathematics and science teachers that it has become a national model, providing a blueprint for other institutions of higher education around the country to achieve similar results.

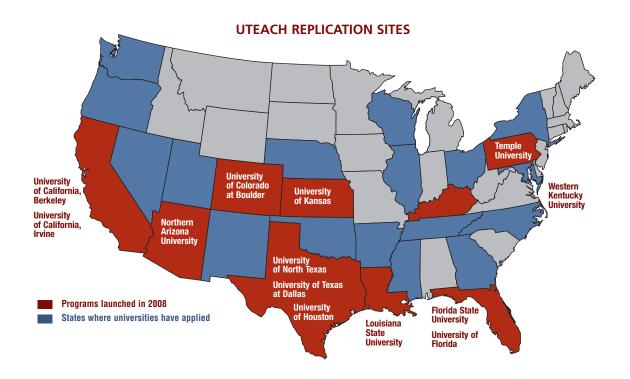
#### The UTeach Institute

Due to UTeach's success and the national attention it has received, institutions from all over the country have expressed interest in replicating UTeach. The UTeach Institute was created to support the replication of UTeach at qualified colleges and universities in the United States. Its primary goal is to increase the number and quality of mathematics and science teachers nationwide.

The UTeach Institute provides direction and support to institutions of higher education that are starting UTeach-based programs, including budget assistance, guidance with implementation of the UTeach Elements of Success, course development, training, and consultation as well as evaluation services to assist colleges and universities in keeping programs on track and achieving goals. In addition, the UTeach Institute has created a number of resources to help replication sites implement with fidelity, including the UTeach Operations Manual; the UTeach program curricula; and a user-friendly, secure, Web-based data system that allows program staff at replication sites to enter data via the Web, easily develop reports, and enable real-time contact with students enrolled in their programs. Finally, the Institute is supporting a community and network of faculty and master teachers who teach the UTeach courses to facilitate the sharing of successful practices.

In March 2007, the UTeach Institute and NMSI released a competitive request for proposal (RFP), encouraging universities interested in starting UTeach-based programs to apply for grant funds. A total of 52 pre-proposals were received, including eight from Texas higher education institutions. Twenty-nine universities, including four from Texas, were invited to submit full proposals and attend the UTeach Institute conference, held June 13-14, 2007. The UTeach Institute received full proposals from four Texas applicants and 22 applicants from other states on July 20, 2007.

Thirteen sites were selected for replication: Florida State University, Louisiana State University, Northern Arizona University, Temple University, University of California at Berkeley, University of California at Irvine, University of Colorado at Boulder, University of Florida, University of Houston, University of Kansas, University of North Texas, University of Texas at Dallas, and Western Kentucky University.



To date, each of the 13 universities has received funds for and completed the eight-month planning period, which took place during the Spring and Summer of 2008. During this time, each site received funding and prepared for four years of program implementation. As of Fall 2008, all replication programs are underway.

#### Accomplishments of Replication Sites During the Planning Period

Major accomplishments during the planning period include:

- + Target Enrollment: All 13 sites submitted target enrollment numbers for student recruitment into the first UTeach course, Step 1, for Fall 2008. In the end, a total of 544 students were recruited, representing the first cohort of UTeach students nationwide. Actual enrollment numbers are provided in the table on page 25.
- + **Student Recruitment:** All 13 sites engaged in a variety of recruitment strategies, including the distribution of promotional signs, brochures, letters, emails, and flyers, as well as presentations at orientation sessions and in classrooms.
- + **Faculty and Staff:** All 13 sites have identified faculty members to teach the UTeach courses, and all have hired master teachers.
- + **Four-Year Degree Plans:** Nine of the 13 sites have fulfilled expectations on degree plan revisions, successfully combining content coursework and certification requirements into four-year degree plans. Three of the sites are still working to bring their degree plans into alignment with these expectations, and the Institute is working with a final site to determine how best to address its deviations from the UTeach model.
- + **Development:** Eight of the 13 sites obtained private funds toward their endowments during the planning period.

- + **Space:** Four of the 13 sites have secured adequate, long-term space for program offices and class-rooms, and seven other sites are making strides towards this. The UTeach Institute is working closely with two other sites to facilitate space allocation.
- + **UTeach Institute Support Services:** Faculty and staff members from all 13 sites attended UTeach Institute support events.
- + **Establishing Steering Committees:** All of the 13 sites will have established steering committees that meet regularly by Fall 2008.

#### **Fundraising Progress**

Although sites were not expected to make significant headway in fundraising until later in the implementation schedule, all sites are actively planning fundraising strategies and many have already secured funds.

University	Endowment Funds Raised	Operating Funds Raised: Dedicated to Program	Operating Funds Raised: Shared With Other Programs
The University of Kansas	\$100,000	\$250,000	
Western Kentucky University	\$175,000		
CU Boulder		\$470,000	\$3,000,000
University of Florida	\$1,000,000		
Temple University	\$70,000		
UC Berkeley		\$360,000	
UC Irvine			\$500,000
The University of Texas at Dallas	\$300,000		\$750,000
Louisiana State University			\$500,000
Florida State University	\$1,000,000		
The University of Houston		\$320,000	
The University of North Texas	\$110,000	\$110,000	
Northern Arizona University	\$1,000,000	\$276,625	
Total	\$4,755,000	\$1,786,625	\$3,750,000

(Data current as of June 2008)

#### **Expected Teacher Output**

University	Actual Enrollment, Fall 2008*	Estimate of Program's Initial Annual Teacher Output, First Full Year After Grant Period**	Estimate of Program's Annual Teacher Output, Three Years After Grant Period
The University of Kansas	63	61	61
Western Kentucky University	30	32	41
CU Boulder	51	53	56
University of Florida	41	42	50
Temple University	22	24	33
UC Berkeley	28	35	55
UC Irvine	21	28	46
The University of Texas at Dallas	42	43	52
Louisiana State University	17	18	24
Florida State University	44	45	56
The University of Houston	80	78	87
The University of North Texas	56	55	52
Northern Arizona University	49	47	52
Total	544	561	655

(Data current as of first class day after add/drop period, fall 2008)

#### Accomplishments of the UTeach Institute During the Planning Period

- + **Grant Kickoff Meeting:** On January 11, 2008, the UTeach Institute hosted a dinner and full-day meeting for replicating university co-directors in Austin, Texas. A total of 27 individuals from the 13 universities attended. Ninety-four percent of survey respondents rated the meeting either "good" or "excellent."
- + Instructional Support Web Conferences: The UTeach Institute hosted seven Web conferences on the UTeach courses. These Web conferences introduced UT Austin faculty members to their peers at the replicating universities and provided an introduction to each course in the UTeach curriculum. Between 11 and 16 individuals from the replication sites attended each of the live Web conferences. These conferences were audio-taped and later made available on the secure curriculum website.
- + **Step 1 and Step 2 Workshops:** The UTeach Institute hosted a Step 1 workshop on March 5-6, 2008 in Austin, Texas. This workshop provided a two-day, curriculum-intensive workshop for master teachers. A total of 16 individuals from 11 universities attended. One hundred percent of survey respondents rated the workshop as either "good" or "excellent." A second Step 1 workshop was held for master teachers on May 19, 2008 as part of the pre-conference activities leading up to the UTeach Institute's annual conference in Austin, Texas. A total of 17 master teachers from nine universities attended. A Step 2 workshop was offered the following day, and 21 master teachers from 10 universities attended.

<sup>\*</sup>Assuming incoming freshmen in recruitment class \*\*Assuming intermediary retention rates between key UTeach courses, based on UTeach data

- + Site Visits: The UTeach Institute completed 13, two-day site visits during an eight-week period in Spring 2008. A field team of at least three staff members from the UTeach Institute and UTeach Austin conducted the visits, which were designed to assist with program planning, help create supportive relationships between the sites and the UTeach Institute, and generate interest in the new programs. The universities hosted team meetings as well as meetings with co-directors, district partners, development officers, and state education staff. Members of the field team also were available to provide technical assistance on site.
- + **Technical Assistance:** Three site coordinators and a data coordinator responded to questions and coordinated technical assistance to all 13 sites during the planning period. Site contact records included more than 1,880 issues logged and addressed from January 1, 2008 to October 13, 2008. On average, there were approximately 145 records for each site. Records often included multiple contacts via email and phone calls.
- + Annual Conference: On May 21-22, 2008, the UTeach Institute hosted its second annual conference in Austin, Texas. The Institute offered a pre-conference session entitled "What is UTeach?" as well as a full conference with an operational strand, curriculum strand, and special interest group meetings. Approximately 221 people attended, including 104 individuals from the 13 replication sites and 69 individuals from 25 other institutions interested in learning more about the UTeach program and replication efforts.

#### High-Level Overview of Fall 2008 UTeach Site Visits

As of December 1, 2008	Berkeley	no	FSU	Irvine	KU	nst	NAU	Jemple	JN	HN	UNT	UTD	WKU
Target student enrollment for Step 1 met	<b>\</b>	1	1	1	1	1	1	✓	<b>✓</b>	1	<b>✓</b>	1	<b>✓</b>
Four-year degree plans in development or exist	-1	1	1	1	1	1	1	1	-1	1	1	1	1
Functional classroom/office space exists or is in development	/	1	1	1	1	1	1	1	1	1	1	1	1
Steering committee established and meets regularly	<b>✓</b>	ip	1	ip	1	1	1	1	ip	ip	1	1	1
Step 1 course implemented	<b>✓</b>	1	1	1	1	1	1	1	1	1	1	1	1
Benchmarak #1 site visit completed	<b>✓</b>	1	1	1	1	1	1	1	1	1	1	1	1
PEARS data entered/loaded (Fall 2008)	<b>✓</b>	1	1	ip	1	ip	1	1	1	1	1	ip	1
Surveys completed (entrance and mid-term)	<b>✓</b>	1	1	1	1	1	1	1	1	1	1	1	1
Step 2 listed in Spring 2009 course schedule	<b>✓</b>	1	1	1	1	1	1	1	1	1	1	1	1
Accurate financials to NMSI by deadline	<b>✓</b>	1	1	1	1	ip	1	1	1	ip	1	1	1

<sup>✓ =</sup> site fulfilled expectations of planning period ip = site has plans to bring themselves into alignment with replication goals -1= developing plans for alignment

## UNIVERSITY OF CALIFORNIA, BERKELEY Cal Teach Berkeley

http://calteach.berkeley.edu/

#### Colleges/Schools Involved:

College of Engineering, Dean Shankar Sastry College of Natural Resources, Dean Keith Gilless Graduate School of Education, Dean David Pearson

College of Letters and Sciences, Dean Mark Richards

#### **Co-Directors:**

George Johnson, Engineering Xiaoxia Newton, Education Deborah Nolan, Statistics

#### **Master Teachers:**

George Gagnon Anne Jennings Nicki Norman Elisa Stone

#### **Program Partners:**

Berkeley School District Emoryville School District Oakland School District

#### **Progress Snapshot:**

students have the opportunity to participate in a Pre-Service Teacher Summer Research Institute with the Lawrence Berkeley National Laboratory. Students work full-time for 10 weeks as interns in a research lab learning how to apply their research experiences to teaching. They earn \$400 per week and receive an additional \$1,000 housing allowance for the 10-week period.



## UNIVERSITY OF COLORADO, BOULDER CU Teach Program

http://stem.colorado.edu/cu-teach

#### **Colleges/Schools Involved:**

College of Arts and Sciences, Dean Todd Gleason School of Education, Dean Lorrie Shepard

#### **Co-Directors:**

Dr. Michael Klymkowsky, Biology Dr. Valerie Otero, Science Education

#### **Master Teachers:**

Craig Schneider Debbie Hearty

#### **Program Partners:**

Boulder Valley School District Jefferson County Public School District Denver Public School District

#### **Progress Snapshot:**

CU Teach surpassed its recruiting goal for the initial semester, and has 51 students in the inaugural Step 1 cohort.



## FLORIDA STATE UNIVERSITY FSU-Teach Program

http://fsu-teach.fsu.edu/

#### Colleges/Schools Involved:

College of Arts and Sciences, Dean Joe Travis College of Education, Dean Marcy Driscoll

#### **Co-Directors:**

Dr. Ellen Granger, Biology

Dr. Sherry Southerland, Education

#### **Associate Program Director:**

Dr. Robin Smith

#### **Master Teachers:**

MaLynn Kelso Cindy Dyar

#### **Program Partners:**

Leon County School District

#### **Progress Snapshot:**

FSU-Teach has recently taken over half of a floor in one of their buildings, which includes a main suite with 4-5 offices and a reception and copy area, 2 storage rooms, a student resource room, a kit storage room, an advising suite, a faculty suite, and 2-3 classrooms which will eventually be dedicated to FSU-Teach!

### FLORIDA STATE UNIVERSITY





## UNIVERSITY OF CALIFORNIA AT IRVINE UCI Cal Teach Program

http://www.gse.uci.edu/calteach/academic\_programs.php

#### **Colleges/Schools Involved:**

School of Biological Sciences, Dean Al Bennett School of Physical Sciences, Dean John Hemminger Department of Education, Chair Deborah Vandell

#### **Co-Directors:**

Dr. Sue Marshall, Education
Dr. Michael Leon, Neurobiology
Dr. Ken Janda, Chemistry
Master Teachers:
Terry Shanahan
Karajean Hyde
Kris Houston

#### **Program Partners:**

Santa Ana Unified School District Newport-Mesa Unified School District Tustin Unified School District Irvine Unified School District Compton Unified School District

#### **Progress Snapshot:**

UCI Cal Teach recently hired a third master teacher.



## UNIVERSITY OF KANSAS UKanTeach Program

http://ukanteach.ku.edu/

#### Colleges/Schools Involved:

College of Liberal Arts and Sciences, Dean Joseph Steinmetz

School of Education, Dean Rick Ginsberg

Co-Directors:

Dr. Joe Heppert, Chemistry Chair

Dr. Marc Mahlios, Curriculum & Instruction Chair

#### **Master Teachers:**

Jan Lariviere Dr. Steve Case Brad Williamson Margie Hill

#### **Program Partners:**

Lawrence Public Schools Progress Snapshot:

#### **Progress Snapshot:**

UKanTeach surpassed its recruiting goal for this semester with 61 students in the Step 1 and will have its first graduate in Spring 2009.



## LOUISIANA STATE UNIVERSITY Geaux Teach Math and Science Program

www.lsu.edu/secondaryed/

#### **Colleges/Schools Involved:**

College of Basic Sciences, Dean Kevin R. Carman

College of Arts and Sciences, Dr. Guillermo Ferreyra

College of Education, Dean M. Jayne Fleener

#### **Co-Directors:**

Dr. Bill Wischusen, Biology

Dr. David Kirshner, Mathematics Education

Dr. Frank Neubrander, Mathematics

#### **Master Teachers:**

Sharon Besson John Milam

#### **Program Partners:**

East Baton Rouge Parish

#### **Progress Snapshot:**

Geaux Teach launched an aggressive marketing and recruiting plan that resulted in over 130 students registering for Spring 2009 Step 1 course.



## NORTHERN ARIZONA UNIVERSITY NAUTeach Program

http://www4.nau.edu/cstl/NAUTeach/

#### Colleges/Schools Involved:

College of Engineering, Forestry and Natural Science, Dean Barry L. Lutz College of Education, Dean Daniel L. Kain

#### **Co-Directors:**

Dr. Julie Gess-Newsome, Teaching and Learning, Biological Sciences

Dr. Janet McShane, Mathematics and Statistics

#### **Program Director:**

Sharon Cardenas

#### **Master Teachers:**

Deb Wolf

Dave Thompson

#### **Program Partners:**

Flagstaff Unified School District Maine Consolidated School District Page Unified School District Williams Unified School District

#### **Progress Snapshot:**

NAUTeach surpassed its recruiting goal for the initial semester and has 47 students in the inaugural Step 1 cohort.





### TEMPLE UNIVERSITY TUteach

http://www.temple.edu/cst/tuteach/

#### **Colleges/Schools Involved:**

College of Education, Dean Kent McGuire College of Science and Technology, Dean Hai-Lung Dai

#### **Co-Directors:**

Doug Baird, Biology James Byrnes, Educational Psychology

#### **Master Teachers:**

Herb Green

#### **Program Partners:**

School District of Philadelphia Urban Education Collaborative

#### **Progress Snapshot:**

TUteach was the first of universities replicating UTeach to finalize their degree plans. The program itself and six B.S. with Teaching degree plans were approved by the university in the Spring of 2008. In creating these new plans, TUteach faculty members also took the opportunity to revise and make more rigorous 23 other degree plans in the College of Science and Technology.



College of Education
College of Science and Technology

## UNIVERSITY OF FLORIDA UFTeach Program

www.ufteach.org

#### **Colleges/Schools Involved:**

College of Liberal Arts and Sciences, Dean Paul D'Anieri

College of Education, Dean Catherine Emihovich

#### **Co-Directors:**

Dr. Alan Dorsey, Physics

Dr. Tom Dana, Teaching and Learning

#### **Associate Program Director:**

Dr. Dimple Flesner

#### **Master Teachers:**

Gloria Weber Griff Iones

#### **Program Partners:**

P.K. Yonge School Alachua Public School District

#### **Progress Snapshot:**

UFTeach has already secured a \$1 million endowment grant from the Helios Foundation.



## UNIVERSITY OF HOUSTON teachHOUSTON Program

www.teachhouston.uh.edu

#### Colleges/Schools Involved:

College of Natural Sciences and Mathematics, Dean John L. Bear College of Education, Dean Robert K. Wimpelberg

#### **Co-Directors:**

Dr. Jeff Morgan, Mathematics
Dean Robert K. Wimpelberg, College of
Education
Dr. Simon Bott, Chemistry

#### **Master Teachers:**

Dr. Susan Williams Perri Segura Paige Evans Kristina Lyons Program Partners: Fort Bend Independent School District Houston Independent School District

Spring Branch Independent School District

#### **Progress Snapshot:**

teachHOUSTON surpassed its recruiting goal for this semester with 67 students in Step 1, and will have its first graduate in Spring 2009.



## UNIVERSITY OF NORTH TEXAS Teach North Texas (TNT)

http://www.tnt.unt.edu

#### Colleges/Schools Involved:

College of Education, Dean Jerry Thomas College of Arts and Sciences, Dean Warren Burggren

#### Co-Directors:

Mary Harris, Teacher Education and Administration John Quintanilla, Mathematics

#### **Master Teachers:**

Sarah Taylor Vida Trevino

#### **Program Partners:**

Denton Independent School District Fort Worth Independent School District

#### **Progress Snapshot:**

TNT exceeded their Fall 2008 recruitment goal of 50 students. About 250 students filled out flyers stating that they were interested in the program. TNT capped enrollment at 64 students, and after adds/drops, they currently have a total of 56 enrolled in Step 1.





## UNIVERSITY OF TEXAS AT DALLAS UTeach Dallas Program

http://www.utdallas.edu/uteach/

#### **Colleges/Schools Involved:**

Erik Jonsson School of Engineering and Computer Science, Dean Mark Spong School of Behavioral and Brain Sciences, Dean Bert Moore

School of Natural Sciences and Mathematics, Dean Myron Salamon

Teacher Development Center, Director Scherry Johnson

School of Interdisciplinary Studies, Dean George Fair

#### **Co-Directors:**

Bob Hilborn (Department Chair), Science and Mathematics Education Homer Montgomery, Science Education Mary Urquhart, Science Education

#### **Master Teachers:**

Bill Neal

#### **Program Partners:**

Carrollton-Farmers Branch School District Garland School District Richardson School District

#### **Progress Snapshot:**

UTeach Dallas recently received a commitment from university leadership to provide dedicated space for the program. The new space was designed by master teacher, Bill Neal, and will include offices, classroom space, and a student workroom, and will be located near involved faculty offices.



## WESTERN KENTUCKY UNIVERSITY SKyTeach Program

http://skyteach.wku.edu/home/

#### Colleges/Schools Involved:

College of Education and Behavioral Sciences, Dean Sam Evans

Ogden College of Science & Engineering, Dean Blaine Ferrell

#### **Co-Directors:**

Scott Bonham (PI), Physics Education Research Richard Gelderman, Physics and Astronomy Vicki Metzgar, Education

#### **Master Teachers:**

Melissa Rudloff Rico Tyler

#### **Program Partners:**

Green River Regional Education Cooperative (GRREC)

#### **Progress Snapshot:**

SKyTeach has widespread support from leadership, administration, and faculty members in the involved colleges. The co-directors have established a very strong, involved steering committee, which meets regularly. Faculty members involved in the steering committee are passionate about the program, and almost all have K-12 teaching experience.



#### **Contact Information**

For information about the replication of UTeach programs:

The UTeach Institute 1 University Station –G2550 Austin, TX 78712-0549 www.uteach-institute.org Phone 512-232-2770 FAX 512-232-1491

For information about the UTeach program at The University of Texas at Austin, please visit www.uteach.utexas.edu

#### **FUNDING SUPPORT**

NMSI is marshalling public-private cooperation around the country
thanks to initial funding from Exxon Mobil Corporation, the Bill and
Melinda Gates Foundation, and the Michael and Susan Dell Foundation,
with generous in-kind assistance from IBM and Perot Systems. Thanks to
this inaugural support, NMSI is well on its way to rallying new generations
to the bright promise of math and science.

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"Yes, we know the world is flat. But what are we going to do about it? We need to start educating kids today for the jobs of tomorrow. We need better math and science classes and more math and science teachers. We need to launch a national campaign to make math and science a national priority. And we need to act like our future depends on it. After all, it does."

—Tom Luce, CEO of NMSI

#### NATIONAL MATH AND SCIENCE INITIATIVE

NMSI's mission is to advance math and science education in the United States by expanding programs with proven results on a national scale in order to have a positive impact on America's 50-million-student public school system.

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NMSI Chief Executive Officer, former Assistant Secretary, U.S. Department of Education

**Bruce Alberts** 

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President, The University of Texas at El Paso

Sally Ride

President and CEO, Sally Ride Science, former NASA astronaut, first American woman in space

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Former Assistant Secretary of Education and co-founder of the National Center for Educational Accountability

John Winn, Chief Program Officer

Former State Education Commissioner of Florida

Gregg Fleisher, National AP Training and Incentive Program Director

Former President of AP Strategies

Dr. Mary Ann Rankin, Director of UTeach National Replication

Dean of the College of Natural Sciences at The University of Texas at Austin

Tracy LaQuey Parker, Director of the UTeach Institute Former Manager of Education Market Development at Cisco Systems and Director of Business Development at Parker Solutions Group



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